

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/GB2004/000006

International filing date (day/month/year)
05.01.2004

Priority date (day/month/year)
07.01.2003

International Patent Classification (IPC) or both national classification and IPC
E04B540

Applicant
CORUS UK LIMITED

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the International application
- ☐ Box No. VIII Certain observations on the International application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**International application No.
PCT/GB2004/000006**Box No. I Basis of the opinion**

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/GB2004/000006

Box No. II Priority

1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

Box No. V Reasoned statement under Rule 43*bis*.1(a)(I) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-14
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-14
Industrial applicability (IA)	Yes: Claims	1-14
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following document/s/:

D1: GB-A-1 361 448 (PRINS NV;HOLLANDSE BOUWCOMBINATIE HOLLA) 24 July 1974 (1974-07-24)

D2: US-A-5 809 721 (ANTROPIUS JEAN DANIEL) 22 September 1998 (1998-09-22)

D3: US-A-5 056 348 (GRAY CHARLES R ET AL) 15 October 1991 (1991-10-15)

D4: EP-A-0 129 416 (ROBERTSON UK LTD H H) 27 December 1984 (1984-12-27)

D5: GB-A-2 195 680 (QUIKSPAN CONSTRUCTION LIMITED;UNIV SOUTHAMPTON) 13 April 1988 (1988-04-13)

- 2.1. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 (and 2) does not involve an inventive step in the sense of Article 33(3) PCT.

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and discloses (the references in parentheses applying to this document):

a profiled steel decking (1, fig. 1) which comprises a roll formed steel sheet defining several crests and troughs (2) separated by inclined webs (3) and having boundaries between the webs (3) and the crests (2) which are radiussed to define corners each having a smooth curvilinear profile.

The subject-matter of claim 1 therefore differs from this known profiled steel decking in that **the radius of said corners is between 15 and 30mm.**

The problem to be solved by the present invention may therefore be regarded as selecting a radius which does not lead to a too high deformation and weakening of the corner zones.

The selected radius range of claim 1 (and claim 2) cannot be considered as involving an inventive step (Article 33(3) PCT), as the values of said ranges are

obvious for the man skilled in the roll forming of steel sheets. The skilled person would, without the exercise of inventive skill, consider selecting a radius value within said ranges in order to control the deformation of the corner zones.

Moreover, D2 (fig. 1A and 1B) shows a detail of the corner zone of such a steel decking and D3 (fig. 15 and 16) discloses the roll forming process of such a steel decking. From these documents it is clear that the corner zones of such a steel decking have a smooth curvilinear profile. There is no indication that the radius ranges disclosed in claim 1 and 2 fall outside the radii which a skilled person would consider when producing such a roll formed steel sheet.

- 2.2. Dependent claims 3-14 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, see documents D4 and D5 and the corresponding parts cited in the search report.

(J. Demeester)